REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 314 OPEN OUTDOOR FIRES

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APPENDIX TO RULE 314

AIR CURTAIN DESTRUCTOR AND BURN PIT PROCEDURES

MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 314 OPEN OUTDOOR FIRES

SECTION 100 – GENERAL

- **PURPOSE:** To limit the emissions of air contaminants produced from open burning.
- **102 APPLICABILITY:** Rule 314 is applicable to any open outdoor fire that is conducted within Maricopa County.
- **SECTION 200 DEFINITIONS**: See Rule 100 (General Provisions and Definitions) of these rules for definitions of terms that are used but not specifically defined in this rule. For the purpose of this rule, the following definitions shall apply:
 - **201 AIR CURTAIN DESTRUCTOR** A device designed to form a curtain of air over a pit in which combustion occurs that aids in more complete combustion through increases in turbulence and combustion time.
 - **202 DANGEROUS MATERIAL** Any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.
 - **203 DITCHBANK** A lateral area not to exceed two and one half feet on either side of a ditch.
 - **204 EMISSION REDUCTION TECHNIQUES (ERTS)** Methods for controlling emissions from outdoor fires to minimize the amount of emissions output per unit of area burned. Types of ERTS include minimizing the material to be burned, preventing fire from spreading by lining the area and applying fire retardant foam or water, allowing the material to dry before burning, extinguishing the smoldering burns, burning in piles, and burning in the opposite direction of the wind.
 - **205 FENCE ROW** A lateral area not to exceed two and one half feet on either side of the centerline of a fence.

- **206 FLUE** Any duct or passage for air or combustion gases, such as a stack or chimney.
- 207 OPEN OUTDOOR FIRE OR OPEN BURNING Any combustion of any type of material outdoors, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed and construction burning. Purposes for fires can include prevention of a fire hazard, instruction in the methods of fighting fires, watershed rehabilitation, disease and pest prevention.
- **208 ORCHARD HEATERS** A device which helps prevent frost damage to fruit trees by heating. An orchard heater consists of a pipeline heater system operated from a central control from which fuel is distributed by a piping system from a centrally located tank.
- **209 PUBLIC OFFICER** Any elected or appointed officer of a public agency established by charter, ordinance, resolution, state constitution or statute, but excluding members of the legislature.
- **210 RESTRICTED-BURN PERIOD** A condition declared by the Control Officer whenever meteorological conditions are conducive to an accumulation of carbon monoxide (CO) and/or particulate matter in exceedance of the standards or when air quality reaches other limits established by the Control Officer.

SECTION 300 - STANDARDS

- **PROHIBITION OPEN OUTDOOR FIRES:** It shall be unlawful for any person to ignite, cause or permit to be ignited, allow, maintain any open outdoor fire within the limits of Maricopa County, except as provided in Section 302 of this rule and in Section 303 of this rule.
- BURN PERMIT: A person shall first obtain a Burn Permit from the Control Officer before igniting, causing or permitting to be ignited, allowing, or maintaining the open outdoor fires described in Sections 302.1 through 302.8 of this rule. Before a person to whom a Burn Permit has been issued begins burning, such person shall call, for permission to burn, the fire department having jurisdiction and the Control Officer, who must base his decision to approve or deny permission to burn on National Weather Service forecasts or other meteorological analyses. If a person has obtained a Title V Permit, a Non-Title V Permit, or a General Permit under Regulation II (Permits And Fees) of these rules that includes condition(s) regarding open outdoor fires, then such person shall not be required to obtain a Burn Permit from the Control Officer. See Section 402 of this rule for requirements regarding Burn Permit applications and see Section 403 of this rule for requirements regarding Burn Permit conditions.
 - Open outdoor fires that are declared necessary by the County Agricultural Agent, when such fires have been determined as essential for the purposes of disease and/or pest prevention and certified by actual investigations by the County Agricultural Agent.

- **302.2** Open outdoor fires for the control of weeds for the prevention of fire hazards, when such fires are declared necessary by a public officer in the performance of his official duties.
- 302.3 Open outdoor fires for fire fighting training. See Section 303.10 of this rule for an exemption to this requirement.
- Open outdoor fires for the burning of agricultural ditchbanks and fence rows where other reasonable mechanical, chemical, or other methods of removal are not available.
 - **a.** A high temperature mechanical burner must be used to burn ditchbanks, canal laterals, and/or fence rows.
 - **b.** Burning ditchbanks and/or fence rows is not allowed during a restricted-burn period from October 1 through February 29, unless such fires are required in the performance of an official duty of any public office, or such fires are necessary to thwart or prevent a hazard that cannot be properly managed by any other means, or are necessary for the protection of public health.
 - **c.** An on-site inspection must be conducted to verify that only vegetative materials will be burned.
 - **d.** After an initial on-site inspection has been completed, a Burn Permit may be issued for the same location(s) without having to conduct additional initial on-site inspections. However, periodic, unscheduled, on-site inspections may be conducted on days when such burning has been authorized by the Burn Permit.
- 302.5 Open outdoor fires for the destruction of tumbleweeds in cases where other reasonable methods are not available.
 - **a.** Tumbleweeds must be cut, piled, and dried before burning.
 - **b.** A high temperature mechanical burner may be used to burn undried tumbleweeds in situations where it is not feasible to allow natural drying.
 - **c.** A high temperature mechanical burner must be used to burn tumbleweeds growing along canal laterals and fence rows.
- **302.6** Open outdoor fires for the burning of indigenous scrub vegetation cleared for the purpose of construction or agricultural operations in non-urban areas of low population where other reasonable methods are not available.

- **a.** The Control Officer shall issue such Burn Permit only once per geographical location.
- **b.** An air curtain destructor must be used (see Appendix To Rule 314) for the burning of certain vegetative materials greater than 6 inches in diameter and an on-site inspection must be conducted before burning.
- **c.** An on-site inspection must be conducted to determine removal of all other materials (e.g. wood, rubber, and metal) before the issuance of the Burn Permit.
- Open outdoor fires using an air curtain destructor for the burning of certain material, including but not limited to citrus trees or other types of vegetation. Air curtain destructors shall not be operated closer than 500 feet from the nearest dwelling. See Appendix to Rule 314 for procedures for air curtain destructors and burn pits.
- Open outdoor fires declared necessary by the Federal government or any of its departments, agencies, or agents, or the state or any of its agencies, departments, or subdivisions for the purpose of watershed rehabilitation or control through vegetative manipulation.
- **303 EXEMPTIONS:** A person shall not be required to obtain a Burn Permit in order to conduct open outdoor fires described in Sections 303.1 through 303.11 of this rule.
 - **303.1** Domestic cooking for immediate human consumption.
 - **303.2** Warmth for human beings.
 - **303.3** Recreational purposes, where the combustible material is clean, dry wood, or charcoal.
 - **303.4** Branding animals.
 - **303.5** Orchard heaters for frost protection in farming or nursery operations.
 - **303.6** Disposal of dangerous material.
 - **a.** Disposal of dangerous material must be conducted in compliance with the Department of Environmental Quality's (ADEQ's) regulations.
 - **b.** Before a person conducts an open outdoor fire to dispose of dangerous material, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.

- Fire extinguisher training. This exemption applies only when the training is limited to using a small amount of flammable liquid and a small container (i.e., a wastepaper basket or a flat pan).
- Testing potentially explosive-containing, flammable, or combustible products (e.g., automotive airbags, rocket motors, gas generators, and vehicular assemblies) in accordance with Department of Transportation (DOT) or Department of Defense guidelines.
 - a. This exemption refers to testing of hazard classification, packaging performance, propagation, and/or mass fire, but only when testing area is controlled, is relatively small, and when testing is not considered to be nor is associated with the disposal of dangerous material.
 - **b.** Before a person conducts an open outdoor fire for testing potentially explosive-containing, flammable, or combustible products for hazard classification, packaging performance, propagation, and/or mass fire, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.
- **303.9** Testing potentially explosive-containing products for commercial, military, and law enforcement uses.
 - **a.** This exemption applies only when the testing is controlled, is relatively small, and is not considered to be nor is associated with the disposal of dangerous material.
 - **b.** Before a person conducts an open outdoor fire for testing potentially explosive-containing products for commercial, military, and law enforcement uses, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.
- **303.10** Fire fighting training areas and training structures.
 - **a.** This exemption applies only if the sole source of flame is a burner fueled by either liquefied petroleum gas or natural gas, with a British Thermal Unit (BTU) input per hour rating of less than 2,000,000 BTUs.
 - **b.** Before a person conducts an open outdoor fire for fire fighting training areas and training structures, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.
- **303.11** Proper disposal of flags under 4 United States Code 8.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

- **401 FEES REQUIRED:** A fee shall be charged for a Burn Permit as set forth in Rule 280 (Fees) of these rules.
- **402 BURN PERMIT APPLICATION:** A person shall file with the Control Officer, on a form prescribed by the Control Officer, a Burn Permit application and the complete application fee as described in Rule 280 (Fees) of these rules. The Control Officer shall act on a Burn Permit application and shall notify the applicant within 14 calendar days of the filing of the completed application.
 - 402.1 A separate Burn Permit application is required for each burn site location not contiguous to the location on the original Burn Permit application.
 - **402.2** The Control Officer shall conduct an on-site inspection before issuing the Burn Permit.
 - The issuance of a Burn Permit does not relieve the permittee from any of the requirements of a fire department having jurisdiction, including but not limited to having the Burn Permit validated by such fire department.
 - 402.4 Maricopa County shall not issue permits for its own burning activities. Authority for issuance of permits to the County shall be retained by Arizona Department of Environmental Quality.
- **403 BURN PERMIT CONDITIONS:** The Control Officer may impose any permit conditions that are necessary to ensure compliance with Federal laws, State laws, or these rules. Burn Permit condition(s) may include, but are not limited to, burning hours, notification of intent to burn, and Burn Permit posting.
- **BURN PERMIT DENIAL:** The Control Officer shall deny a Burn Permit application if the material or operations do not meet the criteria described in this rule.
- **405 BURN PERMIT TERMS:** A Burn Permit shall be issued for the following terms:

Air Curtain Destructor

Disease/Pest Prevention

Fire Hazard

Land Clearance

Tumbleweeds

Ditchbank/Fence Row

Fire Fighting Training/Structures

30 days from date of issuance
30 days from date of issuance
30 days from date of issuance
1 year from date of issuance

500 MONITORING AND RECORDS

501 RECORDKEEPING AND REPORTING:

- 501.1 The following information shall be provided to the Control Officer for each time that open burning occurs for persons and operations subject to Sections 302, 303.6, 303.8, 303.9, and 303.10. This information shall be provided on a daily basis either by writing, fax, or electronically and shall include:
 - **a.** The date of the burn; and
 - **b.** The type and quantity of fuel burned for each date open outdoor burning occurs; and
 - **c.** The fire type such as a pile or windrow for each date that open outdoor burning occurs; and
 - **d.** The legal location, to the nearest township, range and section, or latitude and longitude, to the nearest degree minute; street address; or parcel number.

502 RECORDS RETENTION:

- **502.1** Maricopa County shall retain permits issued for open burning available for inspection by the Arizona Department of Environmental Quality (ADEQ) for five years.
- **502.2** For each permit issued, Maricopa County shall have a means of contacting the person authorized by the permit to set an open fire, if an order to extinguish open burning is issued by either the County or ADEQ. Therefore the permit application must contain the name of a contact person and shall list a means of contacting that person.
- **502.3** Maricopa County shall hold or attend an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- **502.4** Maricopa County shall annually submit to ADEQ a record of daily burn activity by May 15 of each calendar year.

APPENDIX TO RULE 314

AIR CURTAIN DESTRUCTOR AND BURN PIT PROCEDURES

A. Burn Pit Requirements

The following must be complied with prior to approval of a pit for burning purposes:

- 1. The pit must not exceed the length of the plenum.
- 2. The width of the pit must not exceed 8 feet.
- 3. The depth of the pit must be a minimum of 15 feet.
- 4. The maximum erosion width must not exceed 12 feet nor must the pit result in excessive emissions at any time due to erosion, regardless of the width.
- 5. The pit must have 4 stable, vertical sides such as, but not limited to, mineral, soil, metal curtain, and masonry.

6. When pit locations are changed, an inspection of the newly located pit must be made by the field inspector prior to burning.

B. Equipment Set-Up

The equipment must be positioned so as to allow the blower's airflow to strike at a downward angle no less than 24 inches below the opposite rim of the pit.

C. Operation Of Blower

- 1. The proper blower speed must be maintained so as to meet emissions standards.
- 2. The blower must be operating when and as long as any material in the pit is burning.

D. Loading Of The Pit

- 1. When loading (feeding) the pit, the material must not extend above the air curtain (blower airflow).
- 2. The loading of materials into the pit must be discontinued at a minimum of 2 hours prior to the end of the designated burning hours. The blower must continue to operate until the end of the burning hours or until combustion is completed.
- 3. Adequate measures must be taken to assure that no emissions emanate from materials left in the pit (i.e., overnight). All materials left in the pit must be extinguished with water or covered over with a minimum of 1 foot of mineral soil.

E. Pit Clean-Out

All materials removed from the pit must be completely extinguished and all reasonable precautions taken to control emissions.

F. Permit Approval Requirements

Prior to any Burn Permit approval, a visual on-site inspection of the pit, the material, and the equipment (operational) must be conducted. Any unauthorized material must be removed prior to approval.

G. Burning Hours

The following burning hours apply:

April - September 6 am - 6 pm October - March 8 am - 5 pm

While complying with the above schedule, the permittee must also obtain permission from the Control Officer on each day of burning. Burning is not authorized on weekends nor on holidays. Rubber and plastic type material must not be used as ignition fuel.